**Uses for Waves Name:**

**The Doppler Effect p. 470-471**

[www.fearofphysics.com/index1.html](http://www.fearofphysics.com/index1.html)

Read about the Doppler Effect

Draw a picture of the waves coming from a stationary object.

Draw a picture of the waves coming from an object moving at 100 m/s. Based on what you read, circle the part of your picture where the sound will be higher pitched. Place a box around the part of your picture where the sound will be lower pitched.

Draw a picture of the waves coming from an object moving at 100 m/s. Based on what you read, circle the part of your picture where the sound will be higher pitched. Place a box around the part of your picture where the sound will be lower pitched.

When the lines hit your ear more often, the frequency of the sound increases. What is the “Rule of Thumb” regarding the Doppler Effect?

**Comparing sound wave technology**

**Ultrasound p. 497-498**

<http://health.howstuffworks.com/ultrasound.htm>

What is ultrasound? What is it used for? How is the picture created?

**Sonar p. 497**

<http://earthguide.ucsd.edu/earthguide/diagrams/sonar/sonar.html>

What is sonar? What is it used for? How is the picture created?

**Sonar and Ultrasound-On your own**

What is similar between these two technologies?